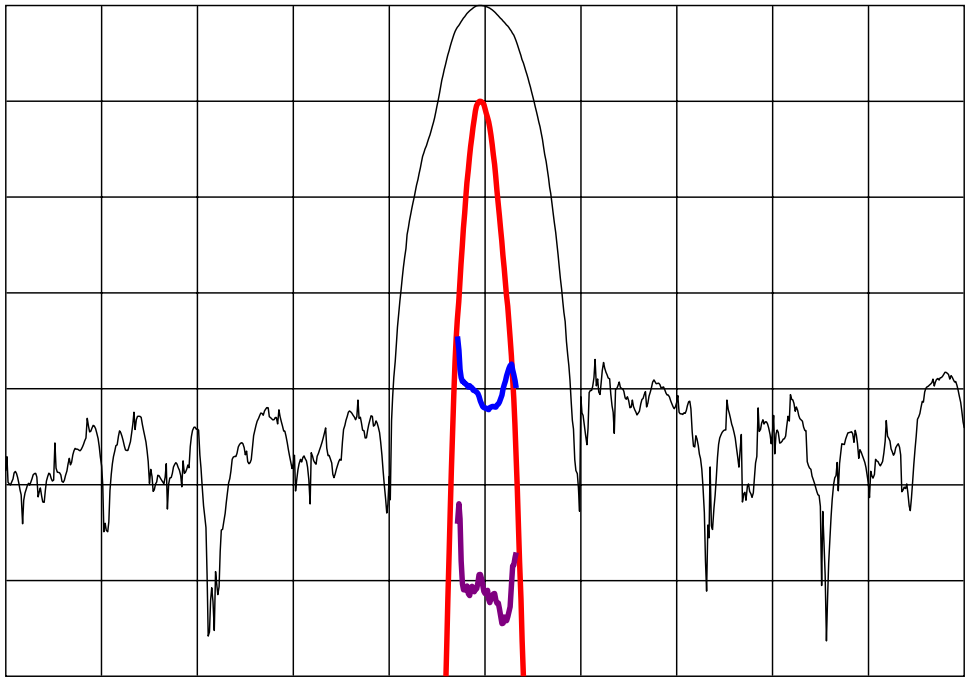
DESCRIPTION

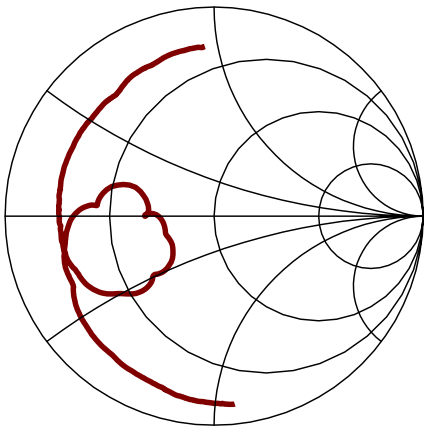
- 72.8 MHz SAW bandpass filter with 1 MHz bandwidth.
- 7 x 5 mm SMP package.
- RoHS compliant.

TYPICAL PERFORMANCE

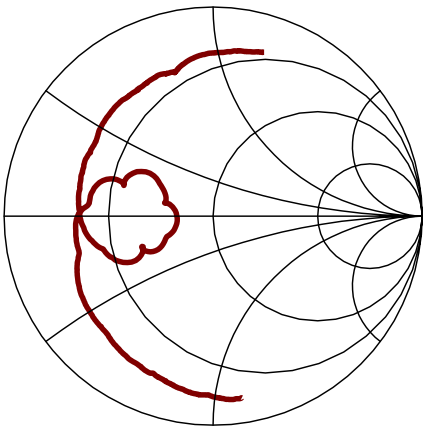


Horizontal:	Frequency :	8	MHz/div
Vertical from Top:	Relative Magnitude :	10	dB/div
	Relative magnitude :	1	dB/div
	Phase :	5	deg/div
	Group Delay :	100	ns/div

S11



S22



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SPECIFICATION

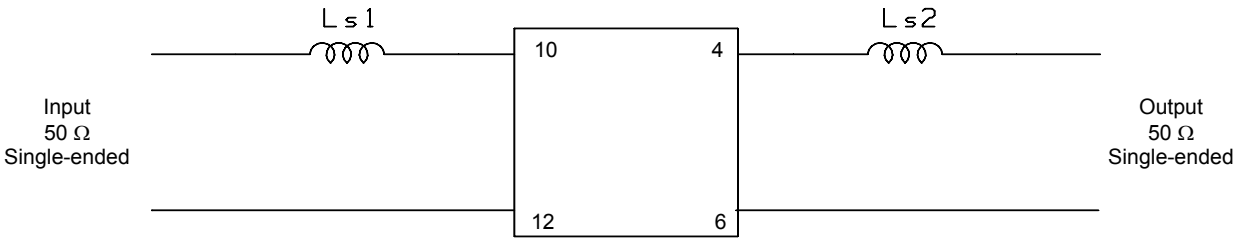
Parameter	Min	Typ	Max	Units
Center Frequency F_C [1]	72.68	72.80	72.92	MHz
Minimum Insertion Loss	-	6.5	10	dB
1 dB Bandwidth [2]	-	0.71	-	MHz
3 dB bandwidth [2]	1.00	1.24	-	MHz
Lower 35 dB Band Edge [2]	70.80	70.99	-	MHz
Upper 35 dB Band Edge [2]	-	74.56	74.80	MHz
Group Delay Variation	-	80	150	ns p-p
Absolute Delay	-	0.75	-	us
Rejection (30 to Fc-3 MHz)	40	42	-	dB
Rejection (Fc+3 to 140 MHz)	35	38	-	dB
Temperature Coefficient	-	-23	-	ppm/˚C
Substrate Material		112 $LiTaO_3$		
Ambient Temperature	-	25	-	˚C

Notes:
1. Defined as the average of the lower and upper 3 dB frequencies.
2. All dB levels are defined relative to the insertion loss.

MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	85	˚C
Operating Temperature Range	-40	70	˚C
Input Power Level	-	10	dBm

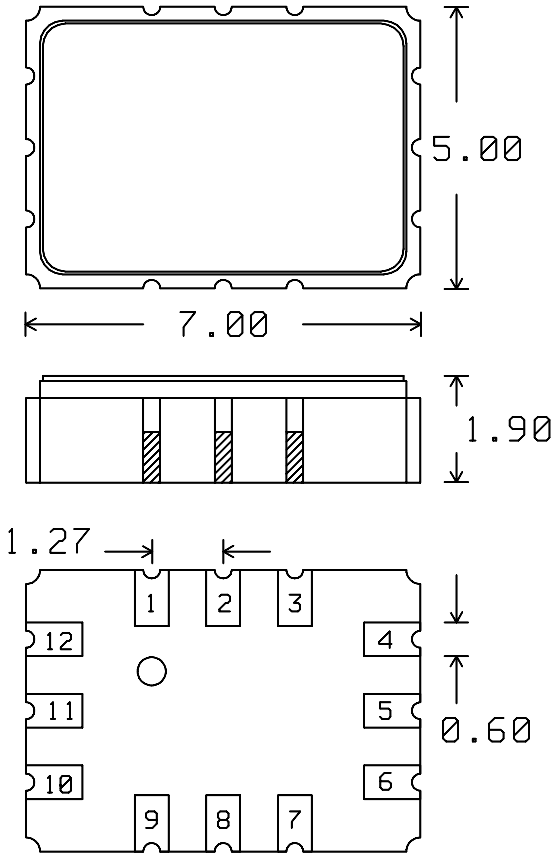
MATCHING CIRCUIT



Typical component values:
(Minimum inductor Q = 45) Ls1 = 390 nH Ls2 = 470 nH

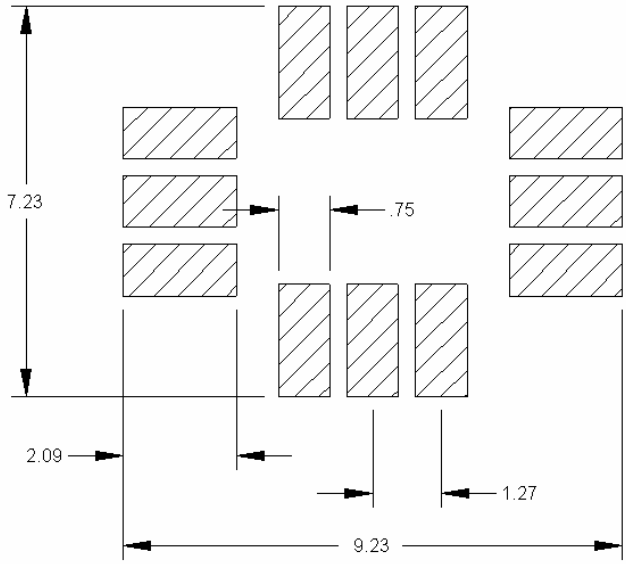
Notes:
1. Recommend the use of ±2% tolerance components.
2. Component values shown are for guidance only and may change depending on board layout.

PACKAGE OUTLINE



Package Material:
Body: Al_2O_3 ceramic
Lid: *Kovar, Ni* plated
Terminations: *Au* plating 1 µm min, over a 1.3-8.9 µm *Ni* plating

SUGGESTED FOOTPRINT



Units: mm

Dimensions are nominal in mm. All tolerances are ±0.15 mm except overall length and width.

Pad Configuration:

Input:	10
Input Return:	12
Output:	4
Output Return:	6
Ground:	1,2,3,5,7,8,9,11

ISO 9001
Registered

All specifications are believed to be accurate and reliable. However, Spectrum Microwave reserves the right to make changes without notice.
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